

# PATENT SPECIFICATION

951,144

DRAWINGS ATTACHED.

Inventor:—RONALD GEORGE FRENCH.

Date of filing Complete Specification : Aug. 8, 1962.

Application Date : May 26, 1961. No. 19046/61.

Complete Specification Published : March 4, 1964.

© Crown Copyright 1964.

951,144



Index at Acceptance :—G4 V(A1A2, HX, P1 B1); A6 H4A1.

International Classification :—G 07 f (A 63 f).

## COMPLETE SPECIFICATION.

### New or Improved Coin-Freed Game Apparatus.

We, R. G. FRENCH (EQUIPMENT) LIMITED, British Company, of 73 Village Road, Higher Bebington, Wirral, in the County of Chester, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a new or improved coin-freed game apparatus and more particularly to a machine simulating the game of Roulette and has for its object to provide a game machine or apparatus adapted when a player inserts a coin, or disc, to carry out, or permit the carrying out of, all the various steps in the game and to pay out any prizes won by a player.

Broadly, a coin-freed game apparatus according to the invention comprises a coin receiving unit including a coin storage tube; an apertured or slotted horizontally disposed wheel or spinner; a divider receptacle situated below said spinner; means for energising said spinner so that it rotates for a limited period of time subsequent to the introduction of a coin to the coin receiving unit; ball handling mechanism for introducing a ball to the spinner whilst it is rotating and for feeding said ball after play into a position for eventually being re-introduced to the spinner; means for paying out a coin or coins from said coin storage tube when a ball passes through an aperture or slot of the spinner and enters a winning compartment of a plurality of compartments of said divider receptacle; and means for resetting the apparatus for subsequent operation.

The machine is preferably enclosed in a casing having a window or windows which permit of progress of a game to be observed without the player being able to interfere

[Price 4s. 6d.]

with the mechanisms operating the machine.

Preferably it is arranged for the course of the game, i.e. the destination of the ball introduced to the wheel, to be influenced by the player's manipulation of a brake or other control thereby introducing an element of skill in the operating of the machine. Scoring may be arranged so that the prizes vary as the probability of winning varies, i.e. the higher the probability, the lower the value of prize. Preferably a jackpot is fitted which pays out when a player obtains the highest possible score.

According to one and a particular embodiment of the invention, the apparatus comprises the following mechanisms:—

- (a) Coin receiving and time control means;
- (b) A wheel or spinner assembly incorporating divider means for receiving and directing balls which pass through slots or apertures of the wheel;
- (c) Ball elevator mechanism for re-locating balls after play in position for being introduced to the wheel;
- (d) Payout mechanism;
- (e) Payout resetting mechanism; and
- (f) A jackpot mechanism.

All the above mechanisms, with the exception of the jackpot which is operated mechanically, are operated electro-mechanically.

The various functions of the machine are arranged to take place in a predetermined cycle under the control of the timing mechanism which is electrically operated and arranged to actuate a plurality of micro-switches controlling solenoids which operate the various mechanisms.

The coin receiving unit is arranged to

BEST AVAILABLE COPY

accept coins or discs (all hereinafter, for convenience, included in the term "coins") as inserted by a player, to initiate play only when a coin is inserted and a button depressed, to prevent more than one coin being inserted at a time thus preventing a second game being commenced before a first game is completed, and to detect and reject false coins.

The time control means functions to operate the various mechanisms above referred to in correct sequence and at predetermined times. Further, it controls the coin receiving unit and prevents a second game being commenced before the first game is finished and releases a coin from the coin unit at the appropriate time.

The wheel or spinner is adapted to rotate for a certain period of time and in so doing to impel a ball round a track which is mounted concentric with the spinner. Said wheel is provided with holes and/or slots wherethrough the ball passes to the divider situated below same.

The said divider is mounted below the spinner so that a ball which passes through the holes or slots thereof may be caught in one of a number of "winning" compartments formed or provided on the upper surface of the divider from whence said ball is directed by guide channels to the payout unit, or, alternatively, said ball drops onto a blank or "losing" section of the divider from whence it drops into what may be termed a "lost ball" tray mounted beneath the divider. All the balls, whether losing or winning, are eventually returned to the ball elevator mechanism. The position and area occupied by the various compartments of the divider are computed so as to give certain probabilities of a win within a given cycle of throws or games.

The ball elevator mechanism functions to deliver one ball only per game onto the circular track surrounding the spinner and to raise balls (which have been previously played) from a ball collecting point of the machine to an elevated position which enables them to be redelivered onto the said track. Further, said mechanism is arranged to receive balls both from the lost ball tray located beneath the divider and from the payout mechanism.

The payout mechanism comprises means which operate at the end of each game to detect the presence of a winning ball, and, in the event of a ball being present, to actuate an appropriate locking lever, or levers, thereby to release a coin slide, or slides, whereby the required number of coins are deposited into a payment delivery chute. Said coin slides are positioned normally so as to receive a continuous supply of coins from a coin storage tube of the coin receiving unit. Upon being released said coin slides

operate to deposit the required number of coins into the coin delivery chute. Said slides are returned to their original position by the payout resetting mechanism.

The jackpot mechanism functions to provide a prize (preferably variable) in addition to the highest prize which is payable by the payout mechanism. It is arranged therefore that coins enter the jackpot compartment when the before referred to coin storage tube is full, and for only a proportion of the coins not entering the said tube to be directed to the jackpot, the remainder going into a main coin receptacle. Preferably the contents of the jackpot are visible to a player.

The invention is further described with the aid of the drawings accompanying the Provisional Specification which illustrate, more or less diagrammatically, and by way of example only, the various mechanisms of a machine according to the invention and their method of operation.

In said drawings:—

Figure 1 is a perspective view of the coin receiving and time control mechanisms of the machine;

Figure 2 shows three operative positions of said coin receiving unit;

Figure 3 is a perspective view of the wheel or spinner;

Figure 4 is a perspective view of the divider and lost ball tray associated with the spinner;

Figure 5 is an elevation of the spinner drawn to a reduced scale;

Figure 6 is a perspective view of the spinner operating mechanism;

Figures 7 and 8 are plan views showing two operating positions of the mechanism;

Figure 9 is a perspective view of the ball elevator mechanism;

Figures 10, 11 and 12, are diagrammatic views of three operating positions of said mechanism;

Figure 13 is a perspective view of the payout mechanism;

Figure 14 a sectional view taken as on line A—A and drawn to an enlarged scale as compared with the preceding view;

Figures 15 and 16 are perspective views further illustrating the method of operation of the payout mechanism;

Figure 17 is a perspective view showing the payout resetting mechanism; and

Figure 18 is a perspective view of the machine with the various mechanisms assembled in operative association but with the outer casing and various parts omitted or broken away to provide a clear understanding of same.

Referring now to Figures 1 and 2 of the drawings, a coin *y* inserted by a player at the top of a chute 1 falls between two vertical guides 1*a* and comes to rest against the upper edge of a lever 2 carried by a

70

75

80

85

90

95

100

105

110

115

120

125

130

shaft 3. This first position is illustrated at A Figure 2. Upon the player depressing an operating button *x*, the coin *y* is advanced by a pivotal and spring influenced plate *x*<sup>1</sup> to a second position B and in so doing said coin depresses the lever 2 (by which it is then held by virtue of a depression 2*a* formed in the upper edge of the said lever 2) by an amount sufficient to cause the shaft 3 to partially rotate in a clockwise direction. A lever 4 attached to the other end of the shaft 3 is thus rotated sufficiently far clockwise as to depress and close a micro-switch 5 and, assuming the apparatus is connected to a source of electric power, current flows to a time control motor 6. This motor 6 is arranged to drive a shaft 7 upon which are keyed cams 8, 9, 10 and 11. Upon rotating in a clockwise manner the cam 8 by virtue of its peripheral shape holds the said lever 4 depressed throughout the remainder of the cycle thus maintaining the current supply to the motor 6. When the cam 8 has rotated through approximately 180°, a lobe on the periphery thereof further depresses the lever 4 to cause a further clockwise rotation of lever 2 whereby the coin *y* drops into a coin storage tube 12 as shown at C in Figure 2.

In order to ensure that one game is completed before another game is commenced, the coin unit is fitted with a retaining device which prevents a second coin from reaching the first position at A in Figure 2. This device comprises an arm 13 pivoted about its centre and fitted with a counter-weight 14 which ensures that normally the upper end of said arm is held clear of the coin guide 1*a*. Upon inserting a coin which falls to said first position, the coin, by virtue of its thickness, displaces the lower end of the arm 13 outward causing the upper end of the arm to move inwards and constitute an obstruction against the passage of further coins. This state is maintained in the second position (B Figure 2) also. Upon the coin falling into the coin tube 12 it is necessary to prevent the arm 13 from assuming its normal position until the game is completed, and this is accomplished by means of lever 15 attached to the shaft 3 in a fixed angular relationship to lever 2. Upon the lever 2 being rotated clockwise to release a coin as described above, the lever 15 also is rotated clockwise and engages with a "U" shaped projection 13*a* provided on the lower end of the arm 13 locking it in the position it would occupy if a coin were in positions one or two. On completion of the cycle, the arm 13 is released and assumes its normal position.

During the rotation of shaft 7 the cams 9, 10 and 11 actuate respectively micro-switches 16, 17 and 18 to cause the various mechanisms hereinafter described to operate in the correct sequence and at appropriate

timing. Upon completion of the cycle, the lever 4 is released by the cam 8 thus interrupting the supply of current to the motor. Thus, lever 2 is restored to its normal position and arm 13 is released by lever 15, whereby the machine is ready to receive a further disc or coin for the next game.

Referring now to Figures 3—8 inclusive, the wheel or spinner comprises an upper flat disc 19 provided with suitable slots and depressions 19*a* on its periphery and which is securely fastened to a lower disc 20 which is slightly dished so as to ensure that balls falling thereon will run away freely. The wheel or spinner assembly 19/20 is mounted at the upper end of a shaft 21 journaled in bearings 22. Also mounted on shaft 21 is a ratchet wheel 23 which is engaged by a detent 24. Detent 24 is mounted on a block 25, being spring loaded by a spring 24*a*, and said block 25 is attached to a shaft 26 which slides in bearings 27. Shaft 26, the blocks 25 and detent 24 are prevented from rotating by means of a guide bar 28. The plunger 29 of a solenoid 30 is attached to one end of said shaft 26 by a link 31, and said shaft 26 is biased in one direction by a helical spring 33 disposed on said shaft and confined between a collar 32 and the adjacent bearing 27. The action of this mechanism is as follows:—

Upon the micro-switch 16 (Figure 1) being momentarily closed by cam 9 the solenoid 30 is energised causing its plunger 29 to be drawn to the right (Figure 7) carrying with it shaft 26, block 25 and detent 24 which thus engages with ratchet wheel 23. Upon the current supply to solenoid 30 being interrupted, shaft 26 under the action of spring 33 returns rapidly to its normal position (Figure 8) and in so doing detent 24 imparts a turning impulse to the ratchet wheel 23 which is transmitted to the shaft 22 and the spinner 19/20. Said spinner is arranged to rotate freely for a period of about 12 seconds.

The duration of time which the spinner rotates can be influenced by a player operating provided brake means comprising a blade 34 made of phosphor bronze or a similar springy material which is attached to one end of a shaft 36 axially slidable within a housing 37. Housing 37 also contains a spring (not shown) for biasing the shaft 36 and thus the blade 34 away from a number of brake pins 35 spacedly attached to the underside of the spinner 13/20. The brake is operated by a player pressing the free end 36*a* of shaft 36 thereby causing the blade 34 to engage with pins 35 and have a retarding effect on the said spinner.

Mounted concentrically with the spinner 19/20, and positioned so that its upper surface is on the same plane as the upper surface of disc 20, is an annular track 38 on which a ball runs during play.

70

75

80

85

90

95

100

105

110

115

120

125

130

Mounted concentrically below the spinner 19/20 is a divider 39 consisting of a shallow cone on which are mounted sectoral compartments 49 divided into three groups. The position and area of each compartment is mathematically computed to give certain probabilities of a win within a given number of games played. The compartments are so arranged that a ball falling into one of them via the slots or apertures 20a of the spinner must pass through an exit hole 42 and exit tube 43 from whence the ball passes to the appropriate inlet tube of the payout mechanism hereinafter described. A central aperture 44 is provided to permit the shaft 21 carrying the spinner 19/20 to pass through the bearings 22 and a collar 44a surrounding the aperture 44 provides the means of attachment of a lost ball tray 45 which is mounted below the divider 39. The lost ball tray is so constructed that balls falling onto blank areas 46 of the divider are caught as they roll off and the said tray is mounted at an angle sufficient to cause balls so trapped to run down to a collecting point 47 whence they pass down an exit 48 and thus to the inlet tube of the ball elevator mechanism hereinafter described. It is to be noted that the divider exit tubes 43 pass through apertures 45a of the lost ball tray 45. A flanged central aperture 49 is provided in the tray 45 to receive the shaft 21 of the spinner.

Referring now to Figures 9 to 12, the ball elevator comprises a feeder unit 50 mounted on a base plate 50a and which has an inlet tube 52 into which pass all the balls returning from play either from the exit tube 48 of lost ball tray 45 or from the payout mechanism. Having passed down tube 52 a ball eventually comes to rest at 53 immediately above the face of a plunger 54. The rearward end of said plunger 54 is cranked through approximately 90° as at 54a and is pivoted at 55. The upper end of the cranked portion of the said plunger is connected to the plunger 56 of a solenoid 57 by means of a link 58. A detent 59 is pivoted at 60 to the feeder unit 50 and projects through a slot of a vertical tube 51 which leads from the top of the feeder unit 50 to a distributor tube 61. The distributor is also fitted with a detent 62 pivoted at 63 and projecting into the rear of the distributor tube as shown.

The action of the mechanism is as follows:—

Assuming the tube 51 to be filled with balls from the upper sloping face 59a of the detent 59 to a point immediately below the lower sloping face 62a of the detent 62, both detents are spring loaded in such a manner that detent 59 in its normal position supports the balls contained in the tube 51 (with the lowermost ball in the before referred to position 53) and detent 62 in its

normal position prevents balls from leaving tube 51 as shown most clearly in the diagram of Figure 10. Upon the micro-switch 17 being momentarily closed by cam 10 (see Figure 1) solenoid 57 is energised causing its plunger 56 and link 58 to move rapidly to the right. The cranked plunger 54 is thus partially rotated clockwise (Figure 11) and the face 54b of said plunger engages with the ball at 53 and lifts the whole column of balls within the tube 51 through the distance occupied by the diameter of one ball. In raising the balls, detent 59 is moved to the left as also the detent 62. Immediately the uppermost ball of the column clears a point 64, the detent 62 resumes its normal position under the influence of its spring 62b and in so doing sharply ejects (Figure 12) the said ball down the exit tube 61 and out onto the annular track 38. Meanwhile, the plunger 54 has resumed its original position under the action of a spring 66 and detent 59 has also returned to its normal position and is supporting the column of balls. A further ball from the inlet tube 52 then moves forward to position 53 and the mechanism is now ready for the next game. In order that the elevator shall work every time a coin is inserted in the machine a number of balls forming a "float" are pre-loaded in the inlet tube 52. Plunger means operated from lever 54 and projecting into the tube 61 may be provided to positively prevent more than one ball being projected by lever 62.

Referring now to the payout mechanism illustrated in Figures 13—16 inclusive. This comprises (see Figure 13) a plurality, in this instance six, of inlet tubes 67 connected one with each of the exit tubes 43 of the divider 39, a corresponding number of coin slides 89 for delivering coins from tube 12 to a delivery chute 93 as prizes, and a similar number of locking levers 85 co-operating with the coin slides. As all these members, their associated components and their method of operation are substantially identical, the construction, arrangement and operation of one co-operating series of components will now be described. Each inlet tube 67 (see more particularly Figure 14) is mounted vertically in a block 68, and positioned at right angles to tube 67 is a further tube 69 which is free to slide axially in a bearing housing formed in said block 68, but is prevented from rotating by means of a flange 70 formed or provided on one end of the said tube and having a flattened portion which engages with the surface of the base plate at 71. At a point immediately below the lower end of the inlet tube 67, the tube 69 is provided with a hole 72 which passes right through the tube and is approximately the same size as the bore of tube 67. The adjacent end of tube 69 is closed by a plug

73. Sliding within tube 69 is a shaft or plunger 74 which, in its normal position, has one end 75 located as shown. The other end of the said shaft carries a compression spring 76 confined between the flange 70 of tube 69 and a bearing block 77 wherein the end of said shaft 74 slides. Said shaft is fitted with an adjustable stop piece 78. The block 77 is provided with a spring loaded plunger 79 which exerts a pressure on shaft 74 and at times engages with an annular groove 80 of the said shaft. The spring 76 by exerting a pressure on flange 70 biases tube 69 towards a position which is determined by a stop 81.

A hole 82 in block 68 communicates with a dead ball tray 83 provided with an exit tube 84. It should be noted that the centre lines of inlet tube 67, the aperture 72 of the tube 69, shaft 74, and hole 82 all lie in the same vertical plane.

A locking lever 85 pivoted at one end at 86, has its other end formed with tooth 87 which is adapted to engage within a notch 88 formed in the periphery of a coin slide member 89 pivoted about an axis 90. Said coin slide 89 is formed with a coin receiving aperture 91 arranged normally to be located directly below and in register with the coin tube 12 whereby its aperture 91 surrounds a coin from the column of coins contained in said tube. An extension spring 92 biases the coin slide 89 in such a manner as to cause it to rotate clockwise if the tooth 87 of locking lever 85 is withdrawn from the notch 88. Positioned below the coin slide 89 is a delivery chute 93 which has an opening 94. A bar 95 is attached to a shaft 96 adapted to slide axially in a block 97, and said shaft 96 is attached to the plunger 98 of a solenoid 99. The bar 95 is so positioned that it can engage with the collar 70 of tube 69.

The action of the mechanism is as follows:—

A ball entering the inlet tube 67 falls to a point 100 (Figure 15) when the micro-switch 18 is momentarily closed by cam 11 (Figure 1) and the solenoid 99 is energised thereby causing its plunger 98 to move to the left drawing with it shaft 96 and bar 95. This latter engages the collar 70 of tube 69 which is thus also moved to the left and cause the plug 73 of tube 69 to engage with the ball at point 100. The ball is forced against the end 75 of shaft 74 and the movement of the tube 69 is such as to cause the ball to move said shaft 74 through a distance sufficient to cause the adjustable stop 78 thereof to engage with the locking lever 85. The lever 85, pivoting about its axes 86, is moved in an anti-clockwise direction sufficiently far to disengage tooth 87 thereof from the notch 88 of the coin slide 89 and said slide is rotated clockwise about its pivot

point 90 by the spring 92 so as to bring the aperture 91 (and the coins contained therein) into register with the opening 94 of the delivery chute 93, whereby said coins are deposited by gravity in the chute 93 as shown. Meantime, the supply of current to the solenoid 99 having been interrupted, the pressure of the spring 76 against the collar 70 restores the bar 95 and the tube 69 to their normal positions. Shaft 74, however, is retained in position by means of the spring loaded plunger 79 which engages with the annular groove 80 on the said shaft. Tube 69 in moving to the right releases the ball trapped between the plug 73 and the end 75 of shaft 74, and, as shown at 101 in Figure 16, said ball falls through the hole 82 into the dead ball tray 83 wherefrom it is returned to the ball elevating mechanism via the exit tube 84. Upon the coin slide 89 and the locking lever 85 being restored to their normal positions the locking lever 85 engaging with the adjustable stop 78 of shaft 74 restores the said shaft to its normal position. The mechanism is then ready to be further actuated. It should be noted that the solenoid 99 will operate during each game whether a ball is present at point 100 or not. If no ball is present tube 69 is moved to the left in the manner previously described but, due to the absence of a ball in said tube the shaft 74 is not moved and thus the respective coin slide 89 is not released and no payment is made.

Each of the locking levers 85, except that for the lowest prize, has a projection (not shown) fixed to it in such manner that when a lever is actuated by the shaft 74 it operates all locking levers having a lower prize value than itself and thus also releases the corresponding coin slides.

The prize value is thus built up by adding together the coin slides and the number of coins transferred from tube 12 to the delivery chute 93. This method of operation enables a single solenoid as 99 to operate the mechanism.

The resetting means for the payout mechanism, see more particularly Figure 17, functions to reset the locking levers 85 and coin slides 89 in their original positions and comprises a bar 102 having a boss 103 with a downwardly projecting lever 104 and which bar 102 pivots about the axis 90 of the coin slides 85. One end of bar 102 is connected to the plunger 105 of a solenoid 106 by a link 107 and the other end of said bar 102 carries a downwardly projecting rod 108 which is adapted in one movement of bar 102 to bear against said locking levers 85. The plunger 105 has a rearward extension 109 carrying a striker member 110 arranged to operate the plunger 112 of an on-off micro-switch 111 which is connected in series with the solenoid 106. The func-

tion of micro-switch 111 is to interrupt the supply of current to the solenoid 106 and to limit the operation of same to those times when the coin slides are released. In this connection it is to be noted that when said coin slides 89 are released by the locking levers 85 and rotate clockwise about their axis 90, plunger 105 and extension 109 are moved to the right. In this movement a rear part 110a of the striker 110 operates against the rear end (not shown) of micro-switch plunger 112 to re-close said switch thereby resetting the circuit for the next game to commence.

Operation of the payout resetting mechanism is as follows:—

Assuming that one or all the coin slides 89 are in the position shown in Figure 16 and that micro-switch 16 (Figure 1) has been actuated by cam 16, electric current flows to the solenoid 106 solenoid 106 is electrically connected in parallel with the solenoid 30 (Figure 6) causing its armature 105 to move to the left thus pivoting the bar 102 about the axis 90. The rod 104 of bar 102 engages the coin slides 89 and pivots them through a distance sufficient for their notches 88 to be re-engaged by the teeth 87 of the locking levers which latter are moved into engagement by the member 108 of bar 102. The springs 92 (Figure 13) hold said coin slides firmly in locking engagement with said levers 85 and correctly locate said slides in coin receiving positions relative to the coin tube 12.

Referring now to the jackpot mechanism, see more particularly Figures 1, 17 and 18, this is mechanical in operation and comprises a compartment 125 having a pivotal trap floor 126 which is normally held in horizontal coin-supporting position by a lever 127 engaged by a counterbalance arm 128 pivoted at 129 and having an adjustable weight 130. Said floor 126 is adjusted to support, say, four coins before pivoting downwards under the weight of said coins when said coins fall, by chance, either through a slot 131 into a jackpot chamber 132, or via a chute 133 into a main coin receiving receptacle (not shown) of the machine. The floor of chamber 132 is constituted by a pivotal trap 134 rigidly attached to a shaft 135 having a crank arm 136 which is engaged by a detent 137 attached to the upper coin slide 89, i.e. the coin slide which, when operated, pays out the highest prize. Normally, said floor 134 is maintained in the position shown in Figure 17 but when the coin slide carrying detent 137 is operated said floor pivots downwards and any coins supported thereon are discharged together with the prize money. When the resetting mechanism operates, the floor 134 is moved back to horizontal position.

From the foregoing it will be seen that the

machine illustrated is automatic in operation and, apart from inserting a coin to initiate a game and depressing the starting button x, a player is not called upon to operate any handles or lever or buttons to complete the game or to receive payment of any prize.

In a simplified form and to increase player participation, payment of the prizes, resetting of the machine, etc. may be initiated by a player manipulating appropriately identified buttons or levers.

The electrical circuits of the machine may include, if desired, indicator lights which denote say, the commencement of a game, its progress and whether or not a prize has been won.

#### WHAT WE CLAIM IS:—

1. A coin-freed game apparatus comprising a coin receiving unit including a coin storage tube; an apertured or slotted horizontally disposed wheel or spinner; a divider receptacle situated below said spinner; means for energising said spinner so that it rotates for a limited period of time subsequent to the introduction of a coin to the coin receiving unit; ball handling mechanism for introducing a ball to the spinner whilst it is rotating and for feeding said ball after play into a position for eventually being reintroduced to the spinner; means for paying out a coin or coins from said coin storage tube when a ball passes through an aperture or slot of the spinner and enters a winning compartment of a plurality of compartments of said divider receptacles; and means for re-setting the apparatus for subsequent operation.

2. Coin-freed game apparatus, as claimed in Claim 1 including a jackpot mechanism for adding to the coins paid out by the paying out means.

3. A coin-freed game apparatus, as claimed in Claim 1 or Claim 2, whereon said coin receiving unit incorporates a device for preventing the insertion of more than one coin at a time.

4. A coin-freed game apparatus, as claimed in any one of the preceding claims, wherein brake means are provided operable by a player and adapted to influence and determine the period of time during which the wheel or spinner rotates.

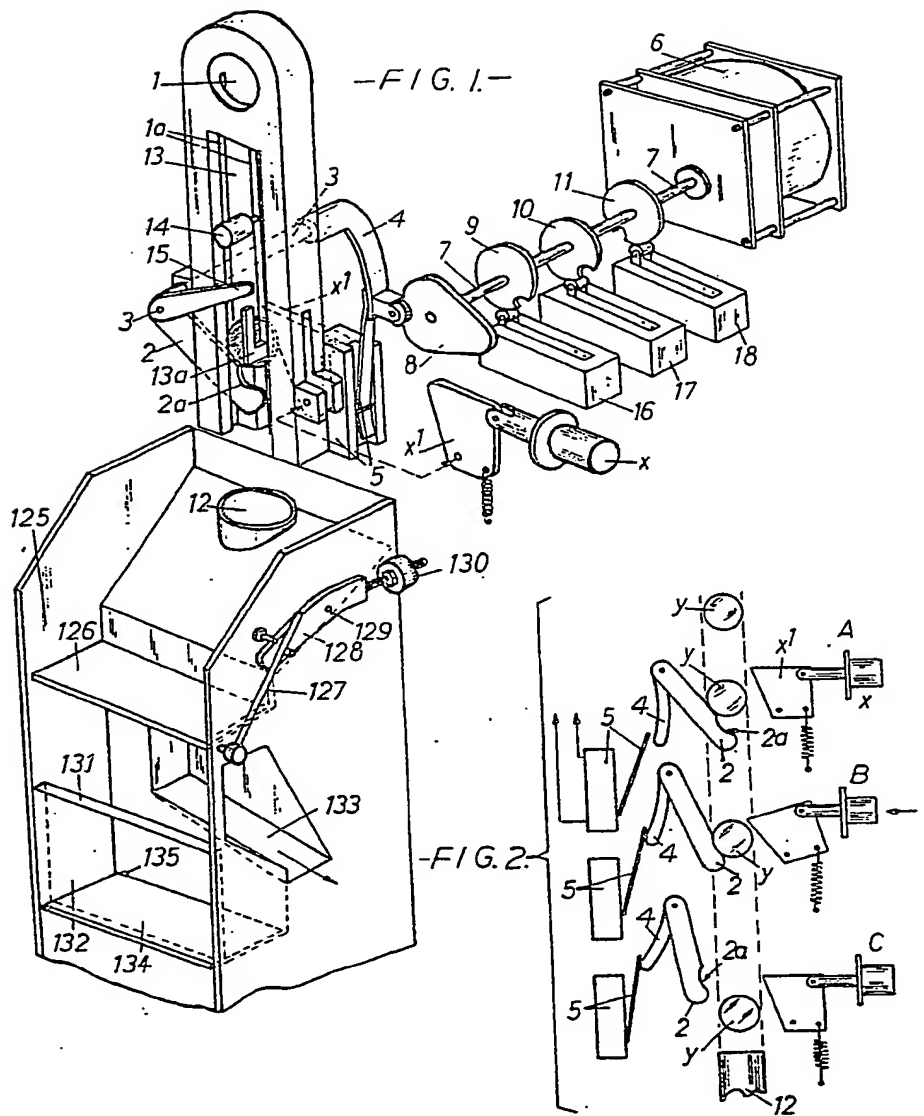
5. A coin-freed game apparatus, as claimed in any one of the preceding claims, wherein operation of the various mechanisms of the apparatus is initiated and timed by an electric motor arranged to drive a shaft carrying a plurality of cams, and the said various mechanisms being operable in timed relationship by electro-magnetic devices controlled by switches arranged for actuation by said cams.

6. A coin-freed game apparatus, as

- claimed in any one of the preceding claims, wherein a lost ball tray is provided for receiving balls not entering winning compartments of the divider and said lost ball tray and said winning compartments having guide tubes connected thereto for directing balls to the ball handling mechanism and pay-out mechanism respectively.
- 5 7. A coin-freed game apparatus, as claimed in any one of the preceding claims, comprising a wheel or spinner and divider means substantially as hereinbefore described with reference to Figures 3—5 of the accompanying drawings.
- 10 8. A coin-freed game apparatus, as claimed in any one of the preceding claims, wherein the means for energising said wheel or spinner comprises mechanism substantially as hereinbefore described with reference to Figures 6—8 of the accompanying drawings.
- 15 9. A coin-freed game apparatus, as claimed in any one of the preceding claims wherein the means for introducing a ball to the wheel or spinner comprises mechanism substantially as hereinbefore described with reference to Figures 9—12 of the accompanying drawings.
- 20 10. A coin-freed game apparatus, as claimed in Claim 9, wherein means are provided for ensuring that only one ball at a time is introduced to the wheel or spinner.
- 25 11. A coin-freed game apparatus, as claimed in any one of the preceding claims, wherein the means for paying out a coin or coins comprises mechanism substantially as hereinbefore described with reference to Figures 13—17 inclusive of the accompanying drawings.
- 30 12. A coin-freed game apparatus, as claimed in any one of the preceding claims, wherein the coin receiving unit comprises mechanism substantially as hereinbefore described with reference to Figures 1 and 2 of the accompanying drawings.
- 35 13. A coin-freed game apparatus, as claimed in any one of the preceding Claims 2—12 inclusive, wherein said jackpot mechanism comprises means for selectively receiving a proportion of coins intended for the coin storage tube of the coin receiving unit when said tube becomes full, and means for at times paying out said coins, substantially as described herein with reference to Figures 1 and 18 of the accompanying drawings.
- 40 14. A coin-freed game apparatus, as claimed in any one of the preceding claims, wherein indicator lights are provided to denote the progress of a game and the result of same.
- 45 15. A coin-freed game apparatus substantially as hereinbefore described and illustrated in the accompanying drawings.
- 50 60

J. HINDLEY WALKER & CO.,  
125, High Holborn,  
London, W.C.1.  
and  
139, Dale Street,  
Liverpool 2.  
Chartered Patent Agents.



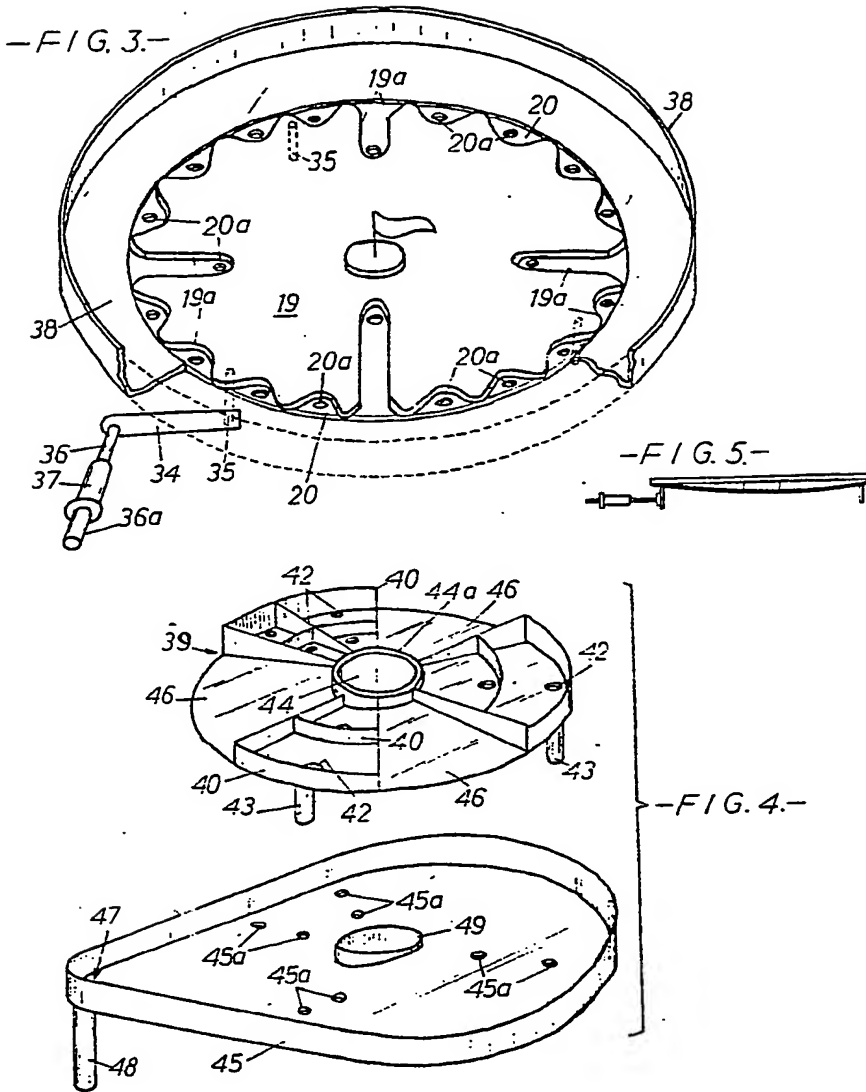


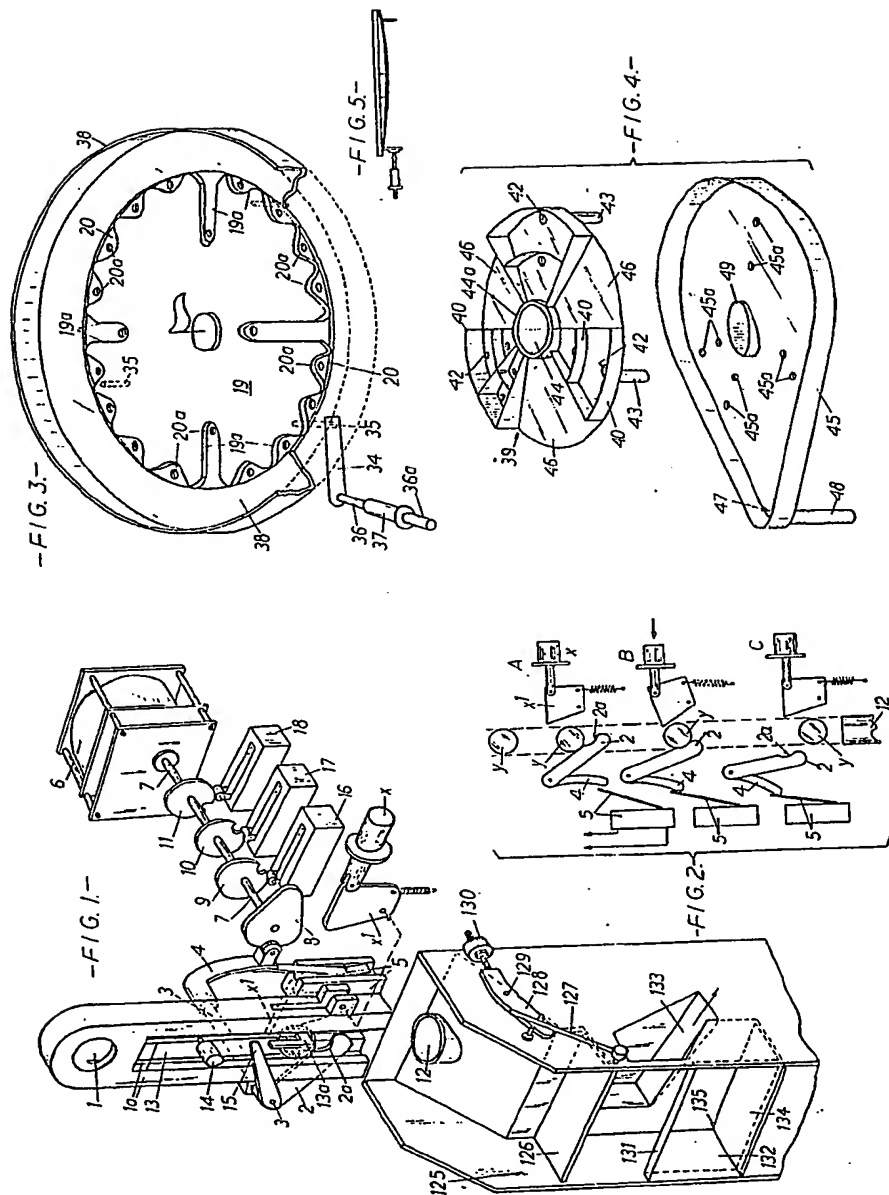


951144  
8 SHEETS

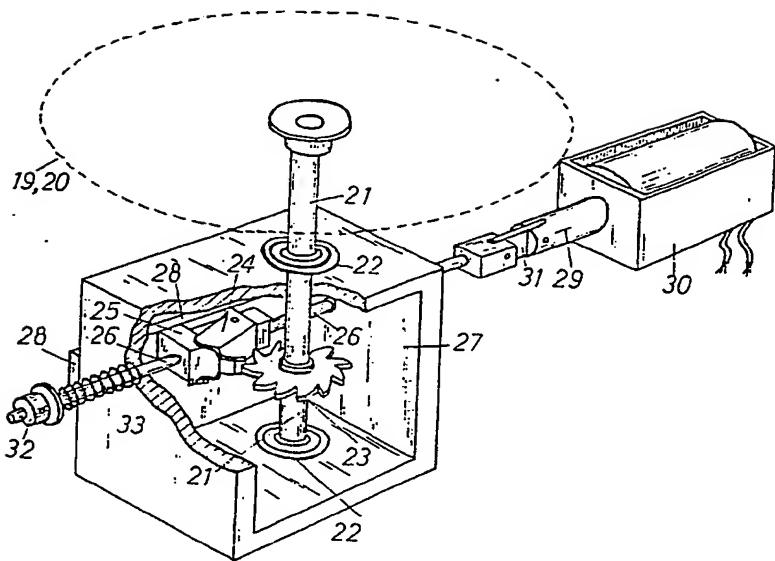
## PROVISIONAL SPECIFICATION

*This drawing is a reproduction of  
the Original on a reduced scale*  
**Sheets 1 & 2**

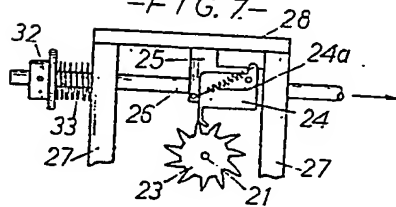




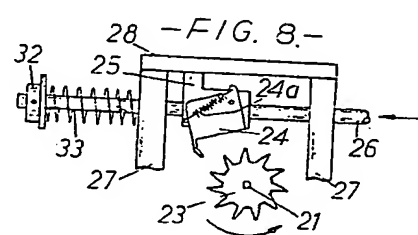
- FIG. 6. -



- FIG. 7. -

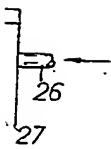
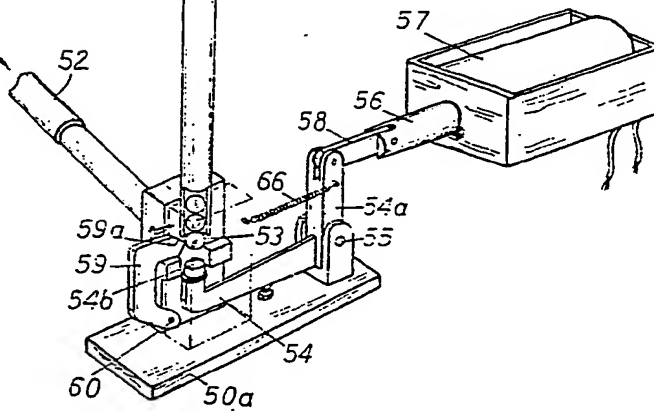
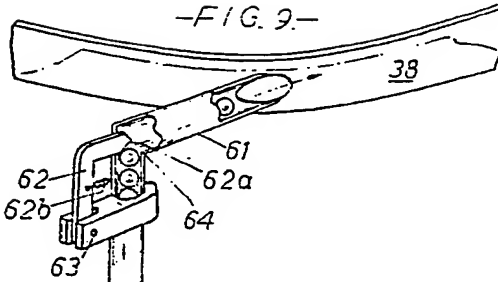
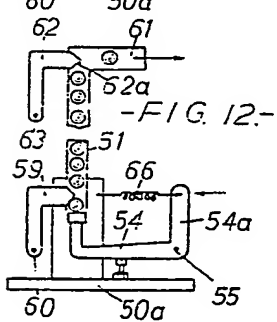
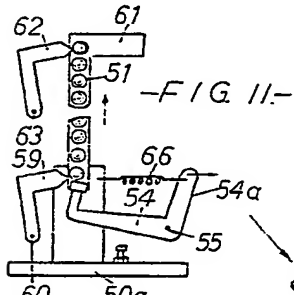
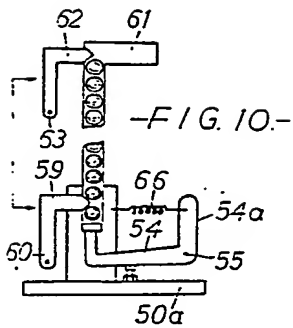
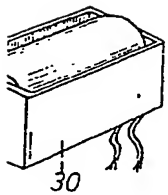


- FIG. 8. -

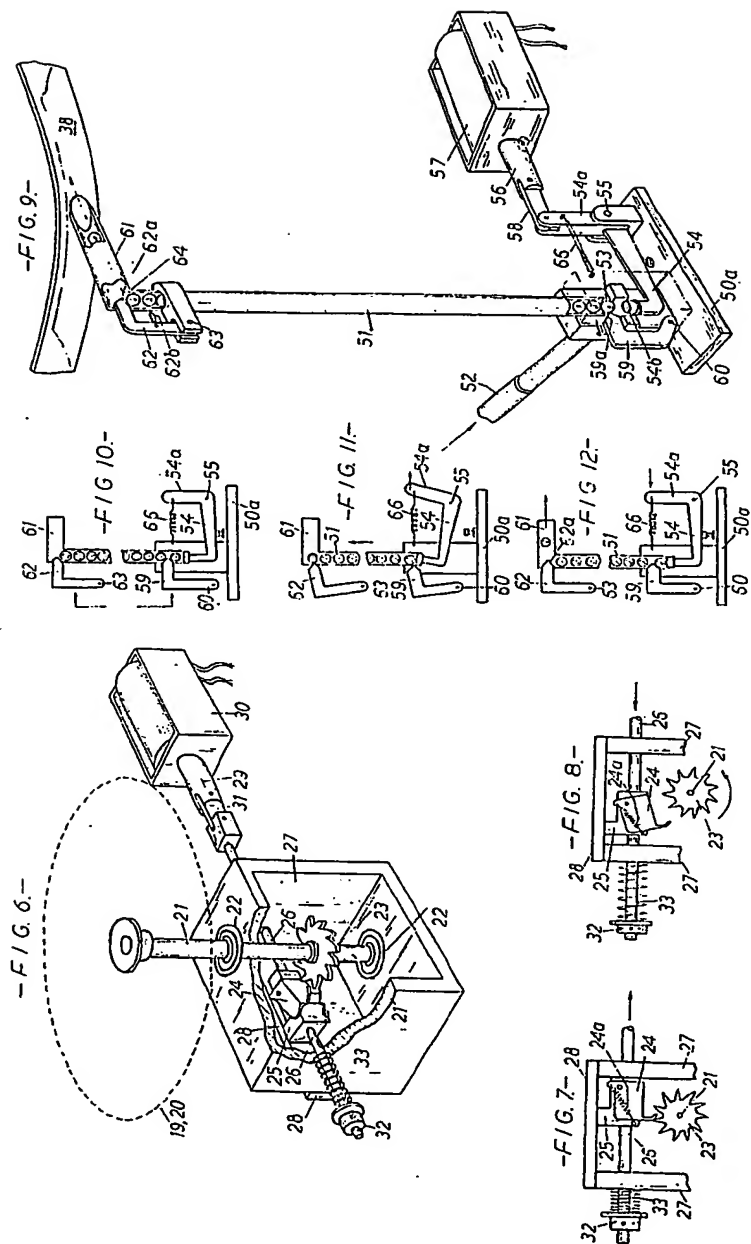


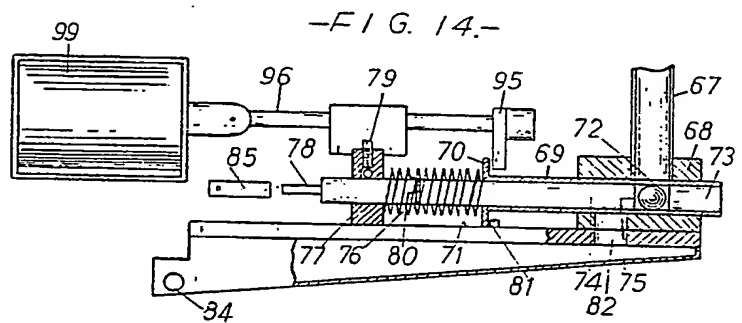
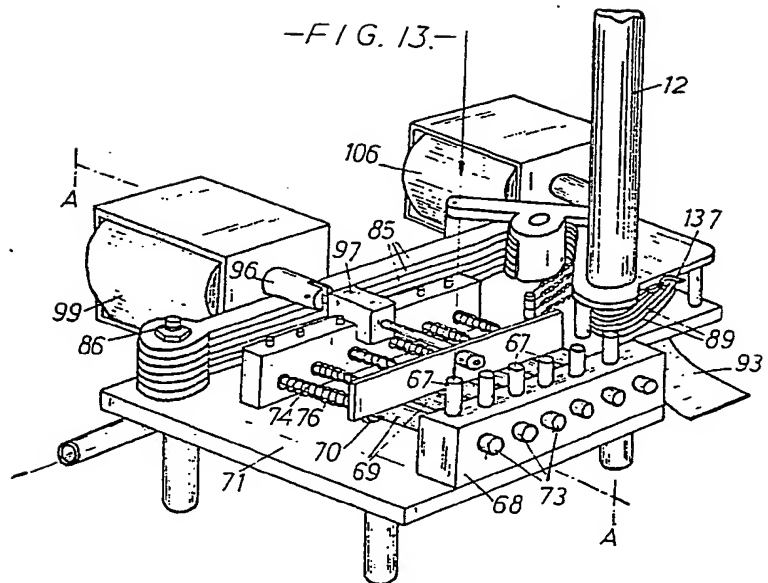
61  
60  
62  
63  
59  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

951144 PROVISIONAL SPECIFICATION  
 8 SHEETS *This drawing is a reproduction of  
 the Original on a reduced scale*  
 Sheets 3 & 4

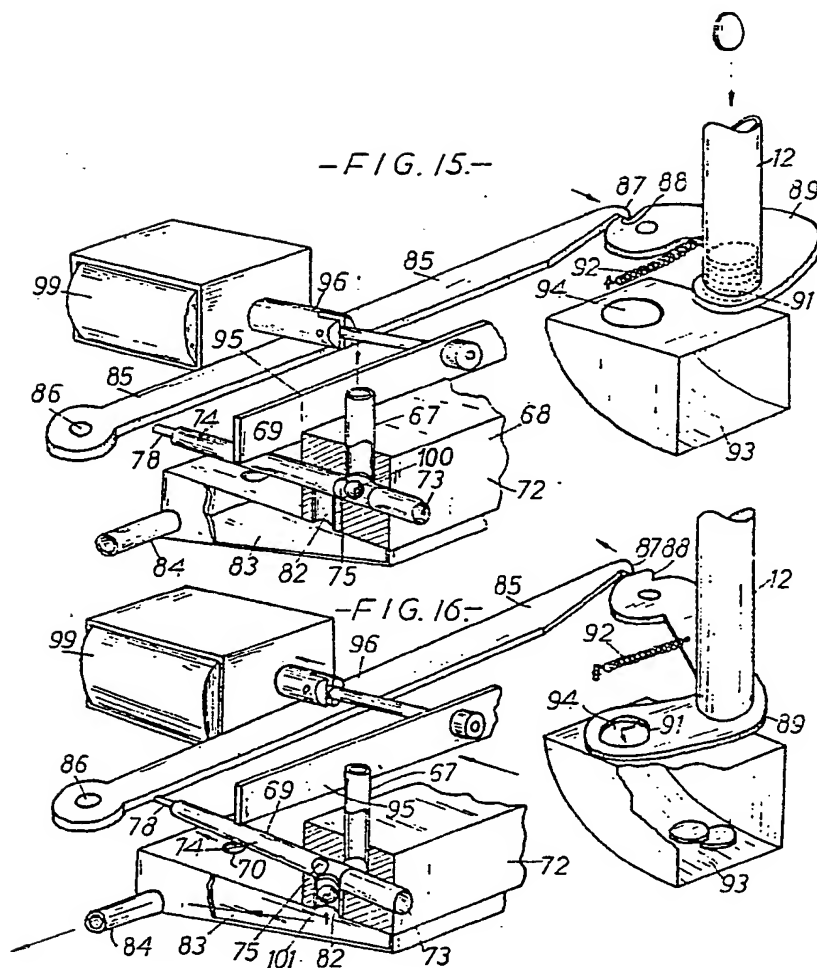
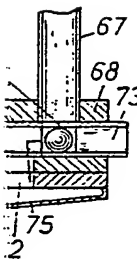
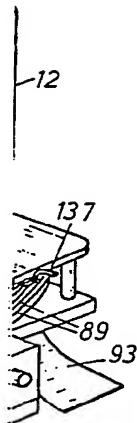


951144 PROVISIONAL SPECIFICATION  
 8 SHEETS This drawing is a reproduction of  
 the Original on a reduced scale  
 Sheets 3 & 4



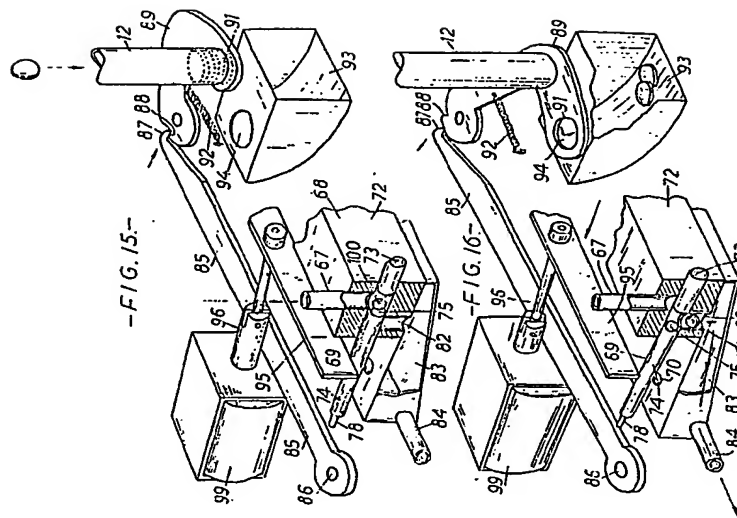
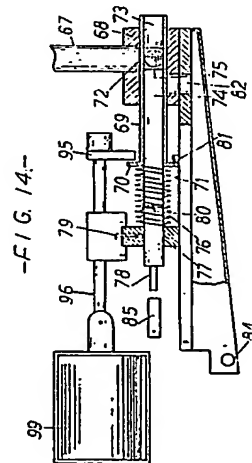
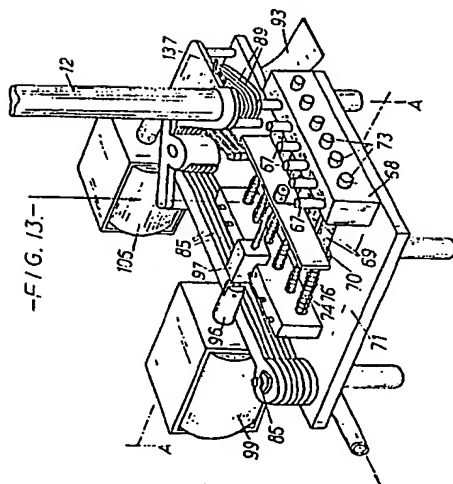


951144 PROVISIONAL SPECIFICATION  
 8 SHEETS *This drawing is a reproduction of  
 the Original on a reduced scale  
 Sheets 5 & 6*

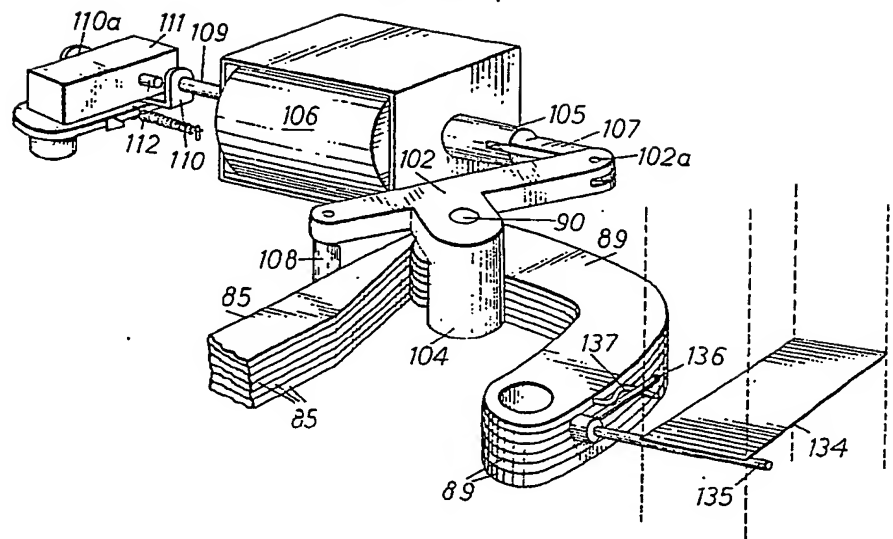




951144 PROVISIONAL SPECIFICATION  
 8 SHEETS This drawing is a reproduction of  
 the Original on a reduced scale  
 Sheets 5 & 6

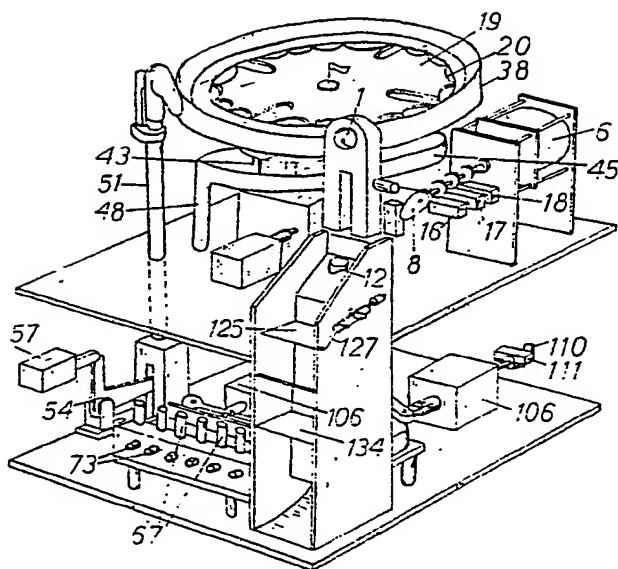
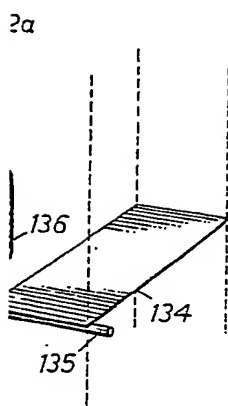


-FIG. 17.-

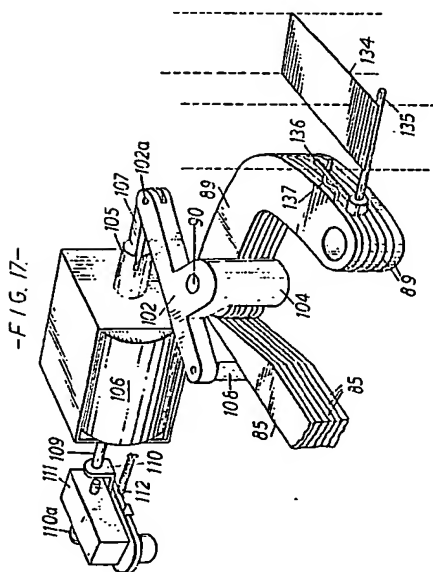
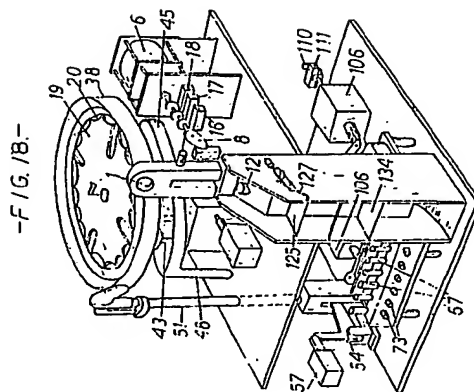


951144 PROVISIONAL SPECIFICATION  
 8 SHEETS *This drawing is a reproduction of  
 the Original on a reduced scale*  
 Sheets 7 & 8

-FIG. 18.-



951144 PROVISIONAL SPECIFICATION  
 8 SHEETS This drawing is a reproduction of  
 the Original on a reduced scale  
 Sheets 7 & 8



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**